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US MILITARY 'TRANSFORMATION': MORE THAN MEETS THE EYE

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Prior to September 11, the United States defence establishment's primary concern was with the next Quadrennial Defense Review (QDR), and the supposedly profound effect it was to have on the composition and performance of the US military. The purpose of the QDR was to provide the blueprint for a revolutionary new US military – technologically advanced, mobile, light and lethal – which would ensure American military preponderance for decades to come. The creation of this 'new model army' is supported by the current Bush Administration, and particularly by Secretary of Defense Donald Rumsfeld, who believes strongly in the need to remake the military into an organization that will lead the way in fighting on the 21st century battlefield. This process has come to be known as 'Transformation', and Rumsfeld continues to be its champion. However, the road to Transformation has proven a difficult one to travel.

What is Transformation?

Following the Cold War, the US was saddled with a large military force structured to fight a traditional mobile 20th century war of massed formations in a manner that was little more then a faster, more lethal version of the Second World War. The equipment and units built up to fight a war in Central Europe consisted of tanks, aircraft and support systems that were simply modern iterations of their early 20th century counterparts. The central idea behind Transformation is to convert these 'legacy forces' into something more in keeping with the expected nature of future conflicts. As the US is likely to remain the pre-eminent military power in the world for some time, conflicts involving US forces will be overwhelmingly asymmetric, whereby opposing forces will seek to exploit weaknesses in America's defence, rather than confront its many strengths head on.

With these developments in mind, the US military has articulated a number of policy goals:

- To defend the US homeland and other bases of operations, and defeat nuclear, biological and chemical weapons, and their means of delivery ;
- To deny enemies sanctuary - depriving them of the ability to run or hide - anytime, anywhere;
- To project and sustain forces in distant theaters in the face of access denial threats;
- To conduct effective operations in space;
- To conduct effective information operations;
- To leverage information technology to give joint forces a common operational picture.[1]

To achieve these objectives, the Pentagon has begun pursuing initiatives which will form the 'pillars' of Transformation. These include:

- Strengthening joint operations through standing joint task force [utilizing interactive abilities of all branches of the US military] headquarters, improved joint command and control, joint training, and an expanded joint forces presence policy;
- Experimenting with new approaches to warfare, operational concepts and capabilities, and organizational constructs such as standing joint forces through war-gaming, simulations and field exercises focused on emerging challenges and opportunities;
- Exploiting US intelligence advantages through multiple intelligence collection assets, global surveillance and reconnaissance, and enhanced exploitation and dissemination. [2]

That in turn has been interpreted to mean the following:

- A heightened emphasis on command, control, communications, computers, intelligence, and surveillance (C^4IS) capabilities with the goal of constructing a near-perfect 'picture' of the battlespace;

- The creation of joint forces that are lighter, capable of rapid deployment and easily adaptable to divergent operational conditions, and equipped for enhanced lethality (a change from a 'threat-based' to a 'capabilities-based' force);

- An emphasis on the use of "precision weapons, networked communications, robotics and information processing";[3]

- Increasing and maintaining "US advantages in stealth, standoff, hypersonic and unmanned systems for power projection."[4]

The end result amounts to a paradigm shift in the US military's architecture and doctrine. Clearly, the de-emphasis of traditional heavy and massed formations, and the emphasis placed upon emerging technologies and organizational and operational concepts reflect the central tenets of the Revolution in Military Affairs (RMA).

Is Transformation happening?

The answer to whether Transformation is actually occurring is, mostly yes. The abandonment of the two major theatre war scenario – in which the US military planned to fight two Gulf War-type campaigns simultaneously – has allowed US strategy to free itself from a Cold War paradigm into one more conducive to Transformation. This will be accompanied by the development of a Standing Joint Task Forces (SJTF) headquarters in each of the US regional commands, which are to, "employ new concepts to US asymmetric military advantages and joint force synergies at lower personnel levels."[5]

The 'war' against terrorism in South Asia has given Transformation a major boost. US Air Force unmanned aerial vehicles (UAVs) relayed images of the battlefield to command centres in real time, which then called in US Navy aircraft to attack them. This validated the major pillar of Transformation – particularly joint operations and C^4IS. Similarly, the apparent success of UAVs in conducting battlefield surveillance and impromptu strikes can be seen as a victory for those extolling the virtues of Transformation.

These triumphs have facilitated Congressional efforts to increase defence budget allocations. Over the next five years, $136-billion will be spent on Transformational technologies and systems; $1.7-billion this year alone will be spent on the new and cost-effective satellite-guided bomb, the Joint Direct Attack Munition (JDAM).[6] The most notable increase will come in the area of UAVs, which until the Afghan War were not looked upon favourably by the majority of Congress and by many in the military. The recent Defence Bill passed in the House of Representatives called for the acceleration of developing "pilotless planes for surveillance and attack, such as the Predator...and Global Hawk".[7] In addition, an allocation of $1-billion was provided for UAVs that were rushed into action before their operational testing was complete.[8] While lavish amounts will be spent on Transformation, only 17 percent of the US defence budget will be spent on Transformational systems, putting paid to President Bush's pledge to "skip a generation" of weapons technology.[9]

What is slowing the pace of Transformation are detractors from both the Pentagon and the Department of Defence (DoD). It should be noted that while most are adherents to the RMA and believe in the necessity of Transformation, the consensus is a matter of degree – how much and how fast should things change. Many argue that despite what the advocates of Transformation desire and preach, legacy forces remain essential to American defence strategy and global military predominance. And while there is no actual or potential adversary to challenge American military hegemony, that does not rule out that some power could eventually challenge that supremacy. Thus the US will still require its vast array of traditional military capabilities to remain secure. Legacy forces, it is argued, remain necessary in case the US becomes embroiled in a conflict with a regional military power with considerable traditional force capabilities, such as Iraq or North Korea. It has been suggested that the more Transformational and asymmetric capabilities and doctrine would not be enough to stop an army of tanks, helicopter gunships, massed infantry and artillery; in such a conflict, legacy forces and more traditional elements of doctrine and force application would be required. Thus it is not that Transformation should be abandoned. Indeed, most of its applications are seen as giving a considerable edge to US forces. Rather, it is that the maintenance of legacy forces that should not be abandoned for predominantly experimental doctrine and technologies. The crux of the debate lies with the allocation of financial resources: should the lion's share of the defence appropriations be given to legacy forces with the aim of upgrading current weapons platforms and units into transitional formations, thereby gradually phasing in Transformation, or should Transformation be undertaken in one fell swoop, with newer systems and equipment introduced en masse while phasing out older formations and platforms?

The Challenge of Crusader

When Donald Rumsfeld assumed his post in January of 2001, he was on a mission to jump-start Transformation. He announced his intention to reduce the size of the US military by dismantling one army division, three air force squadrons, one aircraft carrier battle group, and save five percent (or $16.4-billion) on

current defence costs. These, along with the increase in the overall defence budget, could be spent on a combination of 'quality-of-life' initiatives (ie. service pay, housing), large increases in research and development, and various high-tech weapons platforms.[10] By charging forward with this plan and alienating many influential conservatives in the Pentagon, progress towards Transformation slowed considerably. Added to this was Congressional resistance, specifically by those who represented states or districts that would have been adversely affected by the proposed cuts. By August of 2001, it looked as though Transformation would at best be a slow, drawn-out affair, with legacy forces and the services' pet projects largely intact.

Once again, operations in Afghanistan altered this situation. The apparent success of Transformational technology and doctrine on the battlefield, coupled with the publicity these systems have generated in the mainstream media, have breathed life into the drive towards Transformation – as the aforementioned extra money allocated to UAV development can partly demonstrate. However, the challenges facing the future of Transformation is epitomized by the battle currently being fought in the halls of the Pentagon and Capitol Hill over Crusader.

Crusader is a 155mm self-propelled artillery gun that has been under development since 1994. It is the US Army's top acquisition priority and has become the symbol to both sides of the Transformation debate. Proponents of the Crusader, such as Army Chief of Staff, Gen. Eric Shinseki, argue that it is needed to fill a perceived shortfall in organic, long-range indirect firepower available to the ground force. If deployed, it will preclude the need to over-rely on the Navy or Air Force to provide this capability – a crucial consideration if the US were to face an adversary who had at its disposal an air-defence system robust enough to negate US air superiority.

Crusader's detractors argue that the 40-ton behemoth is out of step with the trend towards lighter, more versatile and mobile forces relevant to the 21st century battlefield. Moreover, the $11-billion development costs, along with the price tag of $10.5-million each, render the system cost-ineffective at a time when precision-guided munitions (including those deliverable by artillery) could give the army the capabilities it sought at a fraction of the cost.[11] Summing up his opposition to Crusader, Rumsfeld stated: "it is about foregoing a system designed for a different strategic context to make room [for] more promising technologies that can accelerate Transformation."[12]

The fate of Crusader will symbolize what direction and at what speed US military Transformation will take. The program is the subject of fierce debate in Congress, but at the time of writing opponents of the new gun seem to have the upper hand. Despite Congressional efforts to guarantee $475-million for the system earlier this year, Rumsfeld convinced President Bush on 8 May to strip it away from the Pentagon's long-term spending plans, and to veto any bill that contains funding for it. This development, along with the continued asymmetrical operations in South Asia, will likely accelerate the pace of Transformation. It may also force the armed services to adjust current and future 'wish lists' to fit a more Transformational paradigm.

What US military Transformation means for Canada

One of the key objectives of Canadian defence and foreign policy is to maintain strong links with the US military and other relevant arms of the US national security establishment. This is necessary since Canada is incapable of guaranteeing the defence of its territory and vital interests. But with the US likely to impose Transformation on its armed forces, will Canada be able to keep pace so as to achieve the requisite degree of inter-operability with American forces? Recent joint operations in South Asia show that Canadian units can seamlessly blend into larger US ones. The question is for how long? The military resources of the United States, along with its huge military-industrial complex and research capabilities, mean that it is unlikely that Canada will be able to be 100 percent interoperable with the US military, even in the unlikely event of an increase in defence spending. The question then becomes, what area(s) should Canada concentrate on to remain able to operate on par with its southern ally, and in what capacity?

To answer this question requires Canada to do several things. First, it must re-affirm what the purpose of armed forces is and what capabilities are required to fulfil its mandate. In short, what should it be able to accomplish in practical terms? Does Canada want an armed forces that can conduct significant military excursions into hostile areas of the world, or should it concentrate on a more 'traditional' post-Cold War role of peacekeeping/enforcement? Is there a need for both?

This would call for a major review of Canada's defence (and foreign) policy. Would such a review recommend that the Canadian Forces align its force development goals with those of the United States? Two of the objectives spelled out in a recent departmental document, *A Strategy for 2020*, make a series of recommendations relating to modernization and inter-operability:

> Modernize: "Field a viable and affordable force structure trained and equipped to generate advanced combat capabilities that target leading edge doctrine and technologies relevant to the battlespace of the 21st century"; Interoperability: "Strengthen our military to military relationships with our principal allies ensuring interoperable forces, doctrine and C4I."[13]

Both these goals are essential to continued inter-operability with a transformed US military, but will also likely be very expensive achieve for all three branches of the Canadian Forces. It must then be decided if scarce financial resources should be concentrated on one particular service – a distinct, if unwelcome, possibility – or, in the case of attempting to achieve inter-operability among all three services, what particular capabilities should be accorded priority. Again, this would have to have to take its cue from a revitalized, symbiotic foreign and defence policy, and then given the proper political, financial and bureaucratic backing to see it through.

There already is a trend within the Canadian defence establishment to mirror American efforts at Transformation. LGen Mike Jeffery recently proposed re-organizing the Canadian Army into a 'medium weight' force (similar to the American Interim Brigade Combat Team) with the eventual goal of developing a sophisticated 'Army of Tomorrow'[14]. By placing emphasis on the development of an intelligence, surveillance, target acquisition and reconnaissance (ISTAR) battle management system, the Army of Tomorrow would gel nicely with Transformation efforts in the United States. Canada does have the high-tech capabilities to construct this type of system. What it lacks is an over-arching policy context and the necessary budgetary allocations to develop it. To pursue such an ambitious goal in this manner would threaten Canada's ability down the road to remain inter-operable with its closest ally, thereby forfeiting a degree of influence when matters of mutual interest are discussed.

Conclusion

The United States military is currently undergoing a period of metamorphosis in which it is being converted into a very high-tech, networked, mobile, and lighter joint force. Elements of this process, known as 'Transformation', include the increased use of new organizational concepts, precision weapons, and communications and surveillance capabilities. These have performed with distinction in recent operations in South Asia, thereby legitimizing the overall process.

Opposition to a massive acceleration in the Transformation of the US military is based on the opinion of some in the DoD and the Pentagon that the continued large-scale retention of legacy forces are still necessary. This school of thought has threatened to slow the process of Transformation to a snail's pace. Powerful proponents of Transformation in the Bush Administration – particularly Defence Secretary Donald Rumsfeld – have mounted challenges to this school, as in the case of Crusader. But the enthusiasm of the Executive Branch for Transformation, along with media exposure to the benefits of Transformation in Afghanistan, means that the process will likely be accelerated.

For the Canadian Forces, Transformation threatens its efforts to remain inter-operable with the far more resource-rich US military establishment. Some Canadian military leaders have articulated their own vision of a 'transformed' Canadian Forces. Furthermore, Canada does have enough high-tech know-how to embark on a modest attempt at Transformation itself. However, to bring these efforts to fruition, a thorough review of Canadian defence policy must occur so that limited resources are channelled to areas which will be of maximum benefit to the organization. If successfully implemented, Transformation could be the catalyst through which Canada reconciles its foreign and defence policy goals with its limited budgetary resources.

Notes

1. Paul Wolfowitz, *Prepared Statement for the Senate Armed Services Committee Hearing on Military Transformation*, April 9,2002. <http://www.defenselink.milspeeches/2002s20020409-depsecdef2.html>. Accessed May 1, 2002. Pg. 4
2. Anthony H. Cordesman, *The Quadrennial Defence Review and Force Transformation: Notes for a Cautionary Analysis*. (Washington: Center for Strategic and International Studies, October 2001). Pg. 12.
3. Wolfowitz, pg. 4
4. *ibid*, pg. 5
5. *ibid*, pg. 11.
6. All monetary quotes are made in US dollars. *Ibid*, pg. 6
7. *CNN.com*. <http://www.cnn.com/2002/ALLPOLITICS/05/10/house.defence/index.html>, May 10, 2002.
8. The fact that it is still an experimental system goes some way to explaining why five Predators have been lost in Afghanistan. *CNN.com* <http://www.cnn.com/2002/TECH/science/05/23/combat.drone.ap/index.html>, May 24, 2002.
9. "Crusaders Belong to the Past", *The Economist*. May 18th, 2002. Pg. 30.
10. "Rumsfeld: Older but Wiser?", *Time*. August 27, 2001. pp. 28-29.
11. "Rumsfeld: 'New warfare prompted Crusader Cut." *CNN.com* <http://www.cnn.com/2002/ALLPOLITICS/05/16/rumsfeld.crusader.reut/index.html>. May 17, 2002.
12. *Ibid*.
13. *Advancing With Purpose: The Army Strategy*. Ottawa: Department of National Defence, 2002. pp. 21-22
14. Dale Grant, "The Interim Army and the Army of Tomorrow", *Defence Policy Review*. May 27, 2002.

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